

Application No. 10/797,995
Amendment Dated May 13, 2005
Reply to Office Action of February 16, 2005

REMARKS/ARGUMENTS

This Amendment is responsive to the Office Action mailed February 16, 2005.

In that Office Action, the Examiner rejected claim 1 under 35 U.S.C. §102(b) as being "anticipated" by U.S. Patent No. 6,492,013 (*Ramesh*) and rejected claims 1-11 under 35 U.S.C. §103(a) as having been "obvious" over U.S. Patent No. 5,882,776 (*Bambara*) in view of U.S. Patent No. 5,211,593 (*Schneider*).

This application now contains a total of fourteen claims. Of these, claim 1 is presented in independent form. Claims 2-14 are dependent on independent claim 1. Such dependent claims are to be construed as incorporating all the limitations of the independent claim to which they refer, and if claim 1 distinguishes patentably from the prior art and is allowable, then each of its trailing dependent claims must so distinguish and be allowable. 35 U.S.C. §112. Consequently, the following remarks will focus on the reasons why the cited references do not teach or suggest the combination of features set forth in claim 1 as amended.

Rejection Based on *Ramesh*

The Examiner rejected claim 1 under 35 U.S.C. § 102(b) as being "anticipated" by *Ramesh*. *Ramesh* teaches a polyolefin foam composite structure which has, in the embodiments shown in Fig. 2 and Fig. 3, three layers (12, 14, 18 or 24). However, the layers disclosed in *Ramesh* are all expanded foam layers, which complicates the manufacturing process. The specification to *Ramesh* repeatedly refers to a "foam sheet 12", a "second foam sheet 14", and a "third foam sheet 18" or a "third foam sheet 24". (Col. 3, line 13; Col. 3, line 30; Col. 4, line 51; Col. 4, line 67). *Ramesh* explains that:

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“The inventor has discovered that homogeneous ethylene/olefin-copolymer blends well with polypropylene such that a high quality foam can be made from such blend.

* * *

In addition, PP-homogeneous ethylene/olefin-copolymer blend foam in accordance with the present has surprisingly been found to provide excellent adhesion to both PE foam and to PP foam without the need for adhesives. (Col. 2, lines 20-31) (Emphasis added).

In direct contrast to the teachings of *Ramesh*, claim 1 as presently written calls for a laminate having a core with two additional layers that are non-foam layers and have densities much greater than the foam core. It has been found that this claimed board, which eliminates the use of a high density foam layer between, for example, a polypropylene non-foam layer and a polyethylene foam core, simplifies the manufacturing process while also providing superior bonding between layers of disparate compositions, such as polypropylene and polyethylene. In addition, the claimed combination provides a smoother surface for an outer graphic imprinted film layer. Accordingly, Applicant respectfully requests reconsideration of the rejection of claim 1 as amended. In order to “anticipate” a claim, a reference must disclose each and every element and limitation of the claim. *Hoover v. Custom Metal Craft, Inc.*, 66 F.3d 299, 302, 36 USPQ 1101, 1103 (Fed. Cir. 1995). *Ramesh* does not disclose each and every limitation of claim 1 as amended.

Rejection Under 35 U.S.C. § 103(a)

The Examiner rejected claims 1-11 under 35 U.S.C. § 103(a) as having been “obvious” over *Bambara* in view of *Schneider*. To establish “obviousness”: (1) the prior art itself must suggest or motivate the modification of a reference, (2) there must be a reasonable expectation of success, and (3) the prior art must teach or suggest all of the claimed limitations. M.P.E.P. §

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2143. In this case, *Bambara* and *Schneider* do not teach or suggest, even when combined, all of the limitations of claim 1 as amended. It is respectfully submitted that there is no teaching or suggestion in either *Bambara* or *Schneider* for providing a foam core, a non-foam first layer and a non-foam intermediate layer between the core and the first layer. In particular, *Bambara* discloses, in Fig. 3, a laminate having an inner core (4), an outer layer (22) and an intermediate layer (24) between the outer layer and the core. However, all of the layers taught by *Bambara* are foam layers. In particular, *Bambara* teaches that:

“Core 4 is a laminated foam with multiple layers. In this embodiment, core 4 has four layers including foam 10, foam 12, foam 16, and foam 18 each have average foam densities of between 1.2 and 2.5 pounds per cubic foot and thicknesses of between 3/8 and 1/2 inches. . . . Skin 6 is a laminated foam including outer foam 22 and inner foam 24. Skin 8 is a laminated foam, including outer foam 26 and inner foam 28. Foams 22, 24, 26, and 28 each have average densities of between 4 and 12 pounds per cubic foot and thicknesses of between 1/16 and 1/8 inches, with the outer foams 22 and 26 having average densities lower than the inner foams 24 and 28.” (Col. 5, lines 41-54) (emphasis added).

In direct contrast, claim 1 as amended calls for a first non-foam layer and an intermediate non-foam layer between the first layer and the core. This is in direct contrast to the teachings of *Bambara*. Nor does *Schneider* teach an intermediate metallocene-based non-foam polyolefin layer between a first non-foam layer and a foam core.

Thus, the references relied on by the Examiner, even if combined, fail to teach or suggest all of the claim limitations of amended claim 1. If an individual element of a claimed combination is not present, either expressly or implicitly, in any of the references, then the claimed invention would not have been “obvious” from the references. MPEP 2143.03; *In re Sernaker*, 702 F.2d 989, 994-95, 217 USPQ 1, 5-7 (Fed. Cir. 1983). It should also be noted that

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unsupported assertions of “common knowledge” or “commonsense” to negate patentability based on obviousness is improper. MPEP 2144.03; *In re Lee*, 61 USPQ 1430, 1434-35.

Remarks Regarding U.S. Patent No. 6,773,798 (the “‘798”)

Applicant submits herewith an Information Disclosure Statement that includes an new reference that is being provided to the Examiner for consideration. Claim 1, as amended, distinguishes from the ‘798 patent. While the ‘798 patent discloses in Fig. 2 a three layered embodiment, layer (24) of that embodiment is a “PP foam sheet.” (Col. 7, lines 3-4) (emphasis added). Thus, the ‘798 patent does not disclose the combination of a foam core, a non-foam metallocene-based intermediate layer and a non-foam first layer. Accordingly, Applicant respectfully submits that claim 1 as amended distinguishes from the ‘798 patent, as the ‘798 patent does not teach each and every limitation of claim 1 as amended.

Conclusion

This Amendment is believed to be fully responsive to the Office Action of February 16, 2005, is believed to squarely address each and every ground for objection or rejection raised by the Examiner, and is further believed to materially advance the prosecution of this application toward immediate allowance.

Formal allowance of claims 1-14 in light of this Amendment is, therefore, courteously solicited.